UNITED STATES DISTRICT COURT

EASTERN DISTRICT OF WASHINGTON

PALOUSE PRAIRIE FOUNDATION, et al.,

Plaintiffs,

v.

KEN SALAZAR, et al.,

Defendants.

No. CV-08-032-FVS

ORDER DENYING AND GRANTING SUMMARY JUDGMENT

THIS MATTER came before the Court on February 3, 2009, based upon the parties' cross motions for summary judgment. The plaintiffs were represented by Justin Augustine; the defendants by Lawson E. Fite.

BACKGROUND

The giant Palouse earthworm (*Driloleirus americanus*) ("GPE") can grow to three feet in length. It was once common in the grasslands of the Palouse prairie. However, the Palouse prairie grasslands have all but disappeared and, during the last 30 years, few sightings of the GPE have been published. Given these circumstances, three individuals and three organizations petitioned the Secretary of the Interior to list the GPE as a threatened or endangered species under the Endangered Species Act. The petition triggered a review process:

> To the maximum extent practicable, within 90 days after receiving the petition . . . to add a species . . ., the Secretary shall make a finding as to whether the petition

> presents *substantial scientific or commercial information* indicating that the petitioned action may be warranted. If such a petition is found to present such information, the Secretary shall promptly commence a review of the status of the species concerned.

16 U.S.C. § 1533(b)(3)(A) (emphasis added). Substantial information is information that "would lead a reasonable person to believe that the measure proposed in the petition may be warranted." 50 C.F.R. § 424.14(b).

The petition was evaluated by the Fish and Wildlife Service ("FWS"), whose review of the data was subject to significant constraints. As the FWS acknowledges, it may not subject a petition to "rigorous critical review." (Administrative Record "AR" at 1.) "Rather," the FWS must accept "the petitioners' sources and characterizations of the information, to the extent that they appear based on accepted scientific principles (such as citing published and peer-reviewed articles, or studies done in accordance with valid methodologies), unless [the FWS has] specific information to the contrary." *Id.* In this case, the FWS found that the petitioner's request for listing the GPE was not supported by substantial information. *Id.* at 4. As a result, the FWS declined to engage in further review of the GPE's status. *Id.* The petitioners disagree with the FWS's negative 90-day finding. They have filed an action alleging the Secretary of the Interior and the Director of the Fish and Wildlife Service violated the Endangered Species Act ("ESA") and the Administrative Procedure Act ("APA"). The Court has original jurisdiction over the subject matter of this action. 28 U.S.C. §

1331; 16 U.S.C. § 1540.

STANDARD

The FWS's negative 90-day finding is subject to judicial review under the APA. *Northwest Ecosystem Alliance v. United States Fish & Wildlife Serv.*, 475 F.3d 1136, 1140 (9th Cir.2007). However, the Court may reverse the FWS's finding only if it is "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law." 5 U.S.C. § 706(2)(A). A finding is arbitrary and capricious "only if the agency relied on factors Congress did not intend it to consider, entirely failed to consider an important aspect of the problem, or offered an explanation that runs counter to the evidence before the agency or is so implausible that it could not be ascribed to a difference in view or the product of agency expertise." *The Lands Council v. McNair*, 537 F.3d 981, 987 (9th Cir.2008) (*en banc*) (internal punctuation and citations omitted).

In order to "flesh out" the standard of review, it is useful to consider the type of evidence contained in the plaintiffs' petition. There is little direct scientific evidence concerning the GPE's status and its vulnerability to potential threats. Thus, the plaintiffs' petition relied heavily upon circumstantial evidence. The plaintiffs argue that a reasonable person could infer from the data contained in their petition that the GPE is threatened. The FWS disagreed; largely because, in the opinion of the FWS, the plaintiffs' data does not support the inferences they draw from it. According to the plaintiffs, the FWS acted arbitrarily and capriciously by discounting

their interpretation of the data. They submit that the FWS was required to accept their interpretation unless no reasonable person would accept it. The plaintiffs acknowledge that their interpretation may not be the only reasonable interpretation or even the most persuasive one. That does not matter at the initial stage in the proceedings, say the plaintiffs. All that matters is that their interpretation is a reasonable one. Consequently, as the plaintiffs see it, the FWS's negative 90-day finding must be reversed unless the FWS demonstrates to the Court's satisfaction that no reasonable person would accept their interpretation of the data.

In essence, the plaintiffs are inviting the Court to review the data and make an independent determination with respect to whether the data would lead a reasonable person to believe the GPE should be listed as threatened or endangered. The problem with the plaintiffs' invitation is that it accords insufficient deference to the FWS's scientific judgment. The arbitrary-and-capricious standard "is highly deferential, presuming the agency action to be valid and affirming the agency action if a reasonable basis exists for its decision." *Northwest Ecosystem Alliance*, 475 F.3d at 1140 (internal punctuation and citation omitted). Contrary to the plaintiffs, the issue before the Court is not whether a reasonable person could accept their interpretation of the data, but whether the FWS had a rational basis for concluding that a reasonable person would not do so. In making that determination, the Court must balance two considerations. On the one had, the FWS was obligated to generously evaluate the data

contained in the plaintiffs' petition. On the other hand, the FWS was entitled to use sound scientific judgment in deciding whether the data reasonably supported the plaintiffs' inferences concerning the status of the GPE.

RULING

A. Habitat and Range

The plaintiffs attempted to establish that the GPE is endemic to the Palouse prairie, *i.e.*, that the GPE is confined almost exclusively to the Palouse prairie.[1] The plaintiffs also attempted to establish that the destruction or alteration of the Palouse prairie potentially threatens the GPE. The FWS did not dispute that little of the Palouse prairie grassland remains. Nevertheless, the FWS rejected the proposition that the destruction or alteration of the Palouse prairie is synonymous with the destruction or alteration of the GPE's habitat. As the FWS noted, one of the three places in which a published sighting of the GPE has occurred is the hills west of Ellensburg, Washington; a location which is well outside the Palouse bioregion. Consequently, the FWS questioned whether the GPE is endemic to the Palouse prairie; finding, instead, that the historic range of the GPE is unknown. "Because the extent [of the GPE's] historic range is unknown," said the FWS, "we are unable to assess habitat loss or the species' reduction in range." (AR at 3.)

The FWS's analysis seems to make sense. A species either is

[1] (Memorandum of Points and Authorities (Ct. Rec. 22) at 8 and n.1.)

endemic or it isn't. The fact the GPE has been observed outside the Palouse prairie appears to undermine the plaintiffs' allegation that the GPE is endemic to that region. "Not necessarily," say the plaintiffs. In their opinion, the FWS's interpretation of the Ellensburg sighting is not supported by the scientific literature. They insist that scientists generally agree that the GPE is endemic to the Palouse prairie despite the fact it has been observed in the hills west of Ellensburg. (AR at 172.) The plaintiffs' argument is based, in large part, upon an article written by Sam James. The pertinent section states:

> The CRB [Columbia River Basin] is inhabited by at least three native earthworm species, belonging to three genera. All three ought to be of special' [sic] concern. One, *Driloleirus americanus*, was considered for inclusion in the IUCN Invertebrate Red Data Book because its habitat was threatened and its range was not known to be very large. . . . The currently available information suggests that it may be a narrow endemic utilizing a threatened habitat (shrubland sites with good soil). The collection data do not give much detailed information on habitat type. The three sites (near Pullman and Ellensberg [sic], [Washington,] and Moscow, [Idaho,] . . . are located in what is now agricultural land, grassland and shrubland . . . .

(AR at 172.[2]) As the plaintiffs correctly observe, James describes the GPE as "a narrow endemic utilizing a threatened habitat[.]" The plaintiffs think that James means the GPE is endemic to the Palouse prairie despite being sighted outside that bioregion. But is that

[2]The preceding observation has been included in other publications. (AR 253.)

what he says? Let's take another look at the sentence. According to James, the GPE "may be a narrow endemic utilizing a threatened habitat (shrubland sites with good soil)." The key words are "threatened habitat." The threatened habitat to which James refers is not the Palouse prairie per se, but to "shrubland sites with good soil." In this context, then, James is not saying that the GPE is endemic to the Palouse prairie. Rather, he is saying the GPE is endemic to shrubland sites with good soil. While that habitat exists in the Palouse prairie, the Palouse prairie is not the only ecosystem in which that habitat exists. There is at least one other: the hills west of Ellensburg. James acknowledges as much in the paragraph quoted above. Thus, like the FWS, he seems to recognize that the Ellensburg sighting raises serious issues with respect to the GPE's range. Certainly, his article does not undermine the FWS's interpretation of the Ellensburg sighting. Given the sighting of the GPE in the hills west of Ellensburg, the FWS did not act unreasonably in determining that the GPE's habitat is not limited to the Palouse prairie and that its range is unknown at this time.

B. Population

The plaintiffs attempted to establish that the GPE is rare within the Palouse prairie. Among other things, they presented a study by Fauci and Bezdicek. (AR 113.) During 1999, those two scientists inventoried earthworms at 46 sites "in and around the Palouse region of eastern Washington and northern Idaho[.]" *Id.* They removed six spades of soil at each site, (AR at 115), carefully checking large-

diameter worm borrows for the GPE. *Id.* at 116. They did not find a single GPE. *Id.* at 115. The FWS mentioned their research, acknowledging that the GPE is rare. However, the FWS attached less weight to the article than the plaintiffs do. As the FWS observed (and the plaintiffs concede), developing information regarding the GPE is difficult. (AR at 2.) It lives in burrows that may extend to a depth of 15 feet, and it can escape detection by quickly retreating down its burrow. (AR at 56.) "This may account," said the FWS, "for the fact that, in the presence of very limited formal studies in the bioregion, there have been only a few recorded sightings of the giant Palouse earthworm in the past 107 years." (AR at 2.) The plaintiffs challenge the FWS's assessment of the Fauci and Bezdicek research. As the plaintiffs point out, Fauci and Bezdicek found another deep-borrowing species of earthworm, *Lumbricus terrestris*, at many of the sites they surveyed. If Fauci and Bezdicek failed to uncover the deep-burrowing GPE because their research methods were flawed, then why, ask the plaintiffs, were they able to find other deep-burrowing earthworms? The answer, say the defendants, is that native earthworms such as the GPE rarely travel over the surface of the ground, whereas exotic earthworms such as the *L. terrestris* commonly do. (Defendants' Reply at 6.) Thus, according to the defendants, it is unsurprising Fauci and Bezdicek found *L. terrestris*. The defendants' answer may or may not be correct. The Court is not in a position to say. But what the Court is in a position to say is that the FWS considered the Fauci and Bezdicek research and had a rational basis for declining to draw

the inferences from it that the plaintiffs do.

C. Injurious Agricultural Practices and Exotic Species

The plaintiffs attempted to establish that certain agricultural practices threaten the GPE's habitat. They presented information indicating that ammonia-based fertilizers and some forms of tillage are harmful to earthworms. The plaintiffs argue that the Fauci and Bezdicek research illustrates the deleterious effects of the practices in question. Fauci and Bezdicek observed that *L. terrestris*, the deep-burrowing earthworm mentioned above, was much more common in non-agricultural sites than agricultural sites. According to the plaintiffs, the fact *L. terrestris* is much more common in non-agricultural sites suggests that injurious agricultural practices disproportionately harm deep-burrowing earthworms like the GPE. *L. terestris* was not the only exotic species cited by the plaintiffs in support of their allegation that certain agricultural practices threaten the GPE's habitat. Another species is the *Aporrectodea*. The alleged significance of its presence in the Palouse bioregion is this: There is evidence *Aporrectodea* displaces native earthworm species in prairies whose native vegetation has been destroyed. In the plaintiffs' opinion, the widespread presence of *Aporrectodea* in the Palouse prairie is indicative of both the damage that has been inflicted upon the GPE's habitat and the displacement of the GPE by exotic species of earthworms.

The FWS did not agree. To begin with, said the FWS, "[t]he petition did not provide any information that indicated the types and

amounts of pesticides and herbicides that have been applied to farmed lands within the Palouse bioregion. [The petition] also provided little information indicating the amounts of ammonia-based fertilizer that was applied to farmlands in the bioregion." (AR at 2.) That was not all. According to the FWS, there was another problem:

> [V]ery limited information exists on the specific habitat limitations of the giant Palouse earthworm or on impacts to it from agricultural activities. Most of the information presented in the petition is related to other native and exotic earthworm species, and therefore it is difficult to draw specific conclusions related to whether any of the potential threats raised in the petition affect the giant Palouse earthworm.

Id.

1. Significance of exotic species

The plaintiffs claim the FWS erred by refusing to extrapolate from data concerning other species of earthworms. They point out that, at this stage in the proceedings, they are not required to demonstrate that the presence of exotic species actually threatens the GPE's habitat. To the contrary, they are only required to demonstrate that a reasonable person may believe a threat exists. By refusing to extrapolate, say the plaintiffs, the FWS effectively required them to provide more information than the Endangered Species Act requires at this stage in the proceedings. As the plaintiffs see it, the FWS demanded evidence approaching scientific certainty.

Determining which inferences reasonably may be drawn from data involves the exercise of scientific judgment. Here, the FWS had to decide whether the characteristics of the comparator species are

sufficiently similar to the those of the GPE such that data concerning the comparator species applies with equal force to the GPE. As the plaintiffs seem to acknowledge, the comparator species are similar to the GPE in some respects; dissimilar in others. First, consider the *L. terrestris*. Like the GPE, it is deep-burrowing. However, unlike the GPE, it commonly travels over the surface of the ground. Next, consider the *Aporrectodea*. Like the GPE, it is present in the Palouse prairie. However, unlike the GPE, it burrows through the upper soil horizons. The FWS evaluated the relevant species' similarities and dissimilarities and decided that extrapolation is unwarranted given the record as it now stands. That is the sort of judgment which the FWS must make under the Act. It is inappropriate for a district court to second-guess such a judgment when it is based, as this one is, upon a rational interpretation of the evidence.

2. Tillage

Older forms of tillage were harmful to earthworms. Newer forms of conservation tillage are much less so. "Chisel-plowing, shallow-tining, harrowing, and disking seem to have relatively small effects on either deep-burrowing or shallow-working species. The increases in earthworm populations that occur under long-term conservation tillage can be large." (AR at 100.) In view of the different impacts of older and newer forms of tillage, it was not enough for the plaintiffs to allege that "tillage" threatens the GPE's habitat. The FWS properly expected the plaintiffs to provide documentation concerning the types of tillage commonly employed today by farmers in the Palouse

bioregion. Given the absence of documentation, the FWS was under no obligation to assume that the older, more-harmful forms of tillage are widespread.

3. Fertilizers

Regular annual use of ammonia-based fertilizers tends to decrease earthworm populations. (AR at 101.) However, earthworm populations tend to recover when the application of ammonia ceases. *Id.* at 100. Given this evidence, it was not enough for the plaintiffs to allege that fertilizer applications have increased in the Palouse bioregion during the second half of the twentieth century. The FWS properly expected the plaintiffs to document the extent to which, and the quantities in which, ammonia-based fertilizers are being applied in the Palouse bioregion. Since the plaintiffs did not provide this data, the FWS reasonably refused to infer that fertilizer applications in the Palouse bioregion presently threaten the GPE's habitat.

D. Email

One of the plaintiffs' principal allegations is that the FWS employed a standard more demanding than that specified by the ESA. As support for their allegation, the plaintiffs quote a sentence in an email that an FWS employee sent on September 17, 2007. He wrote, in part, that the FWS's negative finding "is the one that stands out as potentially inconsistent with the [solicitor's] interpretation of reasonable person/circumstances threshold." (AR at 895.) In the plaintiffs' opinion, this statement is like the proverbial smoking gun. It is unmistakable evidence, say the plaintiffs, that the FWS

knew its negative finding was in error. The plaintiffs are mistaken. They place far too much weight on this single, cautious statement. There is no indication that the author of the email actually disagreed with the FWS's negative finding. Fairly read, his statement suggests only that he thought the finding was "potentially inconsistent" with the governing standard as he understood it. His concerns were unfounded. As explained above, the FWS did not act unreasonably in finding that the petition did not present substantial information indicating that the GPE is threatened or endangered.

CONCLUSION

There is little direct evidence about the GPE. Thus, the plaintiffs had to rely almost entirely upon circumstantial evidence. They submit that, at this stage in the proceedings, the FWS must draw every inference from the evidence that could prove to be warranted. The plaintiffs are incorrect. Deciding whether an inference is warranted involves the exercise of scientific judgment. The FWS is required to exercise its judgment in a reasonable manner; that is to say, the FWS must draw every inference from circumstantial evidence that is scientifically reasonable. The Court's role is to determine whether the FWS had a reasonable basis for its interpretation of the evidence. In this case, the FWS acted reasonably. At each point along the analytical path (whether considering the extent of the GPE's habitat, its population, or potential threats to its existence), the FWS had a rational basis for declining to draw the inferences sought by the plaintiffs. Consequently, the Court will grant the FWS's

motion for summary judgment and uphold its determination.

IT IS HEREBY ORDERED:

1. Ken Salazar is substituted for Dirk Kempthorne. Rowan Gould is substituted for Dale Hall. Fed.R.Civ.P. 25(d).

2. The plaintiffs' motion for summary judgment (**Ct. Rec. 20**) is **denied.**

3. The defendants' motion for summary judgment (**Ct. Rec. 28**) is **granted.**

4. The plaintiffs' complaint is dismissed with prejudice.

IT IS SO ORDERED. The District Court Executive is hereby directed to file this order, enter judgment accordingly, furnish copies to counsel, and close the case.

DATED this 12th day of February, 2009.

s/ Fred Van Sickle
Fred Van Sickle
Senior United States District Judge